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ABSTRACT of the Disclosure

A first form line is defined using two or more terrestrial locations. The first form line may be predefined or may be defined by user during a spraying operation. A second form line is then computed using positioning data obtained while following the first form line and a swathing offset corresponding to the width of a spray pattern. The second form line is updated according to one or more deviations from the computed path. The deviations may correspond to operator inputted corrections which allow for obstacle avoidance, etc. The updating generally occurs by following the second form line as defined by the positioning data and the swathing offset and then deviating from the second form line to accommodate one or more terrain features. New GPS data is collected during these steps of following and deviating from the second form line and new positions are computed from the new GPS data. Finally, the updated second form line is defined using the new positions computed from the new GPS data. A further form line may then be defined using the updated second form line information and the swathing offset. A form line following apparatus may include a vehicle fitted with a GPS receiver configured to receive GPS data and GPS correction information and to compute form line following information therefrom. The form line following apparatus may also include a display device configured to receive and display the form line following information.

Application Trimble Ref.: A470 02240.P045